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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/881,341   | 06/14/2001  | Noriyoshi Chizawa    | 1232-4723           | 7022             |
| 27123  | 7590        | 07/05/2005           | EXAMINER            |                  |
| MORGAN & FINNEGAN, L.L.P.<br>3 WORLD FINANCIAL CENTER<br>NEW YORK, NY 10281-2101 |             |                      | GRANT II, JEROME    |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2626                |                  |

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |   |  |
|------------------------------|--------------------------------------|---|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/881,341 | <b>Applicant(s)</b><br>CHIZAWA, NORIYOSHI |  |
|                              | <b>Examiner</b><br>Jerome Grant II   | <b>Art Unit</b><br>2626                   |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 March 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

JEROME GRANT II  
PRIMARY EXAMINER

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)<br>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)<br>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____.<br>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)<br>6) <input type="checkbox"/> Other: _____. |
|---|--|

### DETAILED ACTION

1. 112 Rejection

Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 refers to connecting to other apparatus. The term "other apparatus" is vague and definite. Furthermore, there is no antecedent for **other apparatus**. What other apparatus could applicant intend .

Correction is required.

2. Observations

Claims 1-24 use "comprising" without the colon. Please amend the claims to reflect --comprising:---.

3.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 18, 19 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,526,516 B1 to Ishikawa et al. in view of U.S. Patent No. 5,812,386 to Youn.

Regarding Claim 1, Ishikawa et al. disclose an image processing apparatus (see Figure 1, Element 109) that connects to the other apparatus (see Figure 1 Element 117). through a single cable (refer to Column 2 Lines 60-61). The image processing apparatus (Figure 1 Element 109) is getting its power from the other apparatus (Figure 1 Element 117, and Column 5 Lines 49-52). However, Ishikawa et al. do not disclose a switch that is used to connect or disconnect a power input and a power circuitry.

Youn, on the other hand, discloses a switch (see Figure 2 Element 204 Transistor TR) that is used to connect or disconnect a power input (see Figure 2 Element AC POWER) and a power circuitry (see Figure 2 Element 202). The Power Controller (Figure 2 Element 208) controls the switch TR.

Therefore, it would have been obvious to one having ordinary skill in the art to combine Youn's switching invention with Ishikawa et al.'s invention. The motivation of connecting other devices together using a single cable is to provide an easy way to connect devices together, and connector space required for each device is reduced as well as the cost of making the connections. The motivation of using a power switching circuit is to only provide power when needed; therefore it minimizes power consumption. So, the combined motivation is to effectively distribute power among a plurality of devices, and to reduce cost and connector space.

Regarding claim 2, Youn's invention discloses an AC connector (Figure 2 Element AC POWER), and Ishikawa also discloses an AC power source (see Figure 1).

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Regarding Claim 3, according to Ishikawa et al., their invention can also be achieved by storing program codes that perform the functions according to the embodiments, and reading them with a CPU, or MPU, and then executing the program (refer to Column 26 Lines 43-52). Therefore, it is quite simple for one having ordinary skill in the art to provide a storage medium inside the controller that contains program codes instructing the power controller to control the switch.

Regarding claims 18 and 22, Ishikawa et al. disclose an image output unit (Figure 1 Element 117).

Regarding claim 19, Ishikawa et al. disclose an image processing apparatus (see Figure 1, Element 109) that connects to another image processing apparatus (see Figure 1 Element 117) through a single cable (refer to Column 2 Lines 60-61). The image processing apparatus (Figure 1 Element 109) is getting its power from the other image processing apparatus (Figure 1 Element 117, and Column 5 Lines 49-52). However, Ishikawa et al. do not disclose a switch that is used to connect or disconnect a power input and a power circuitry

Youn, on the other hand, discloses a switch (see Figure 2 Element 204 Transistor TR) that is used to connect or disconnect a power input (see Figure 2 Element AC POWER) and a power circuitry (see Figure 2 Element 202). The Power Controller (Figure 2 Element 208) controls the switch TR.

Therefore, it would have been obvious to one having ordinary skill in the art to combine Youn's switching invention with Ishikawa et al.'s invention. The motivation of

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connecting other devices together using a single cable is to provide an easy way to connect devices together, and connector space required for each device is reduced as well as the cost of making the connections. The motivation of using a power switching circuit is to only provide power when needed; therefore it minimizes power consumption. So, the combined motivation is to effectively distribute power among a plurality of devices, and to reduce cost and connector space.

Regarding claim 23, Ishikawa et al. disclose an image processing apparatus (see Figure 1, Element 109) that connects to another image processing apparatus (see

Figure 1 Element 117) through a single cable (refer to Column 2 Lines 60-61). The image processing apparatus (Figure 1 Element 109) is getting its power from the other image processing apparatus (Figure 1 Element 117, and Column 5 Lines 49-52).

However, Ishikawa et al. do not disclose a switch that is used to connect or disconnect a power input and a power circuitry

Youn, on the other hand, discloses a switch (see Figure 2 Element 204 Transistor TR) that is used to connect or disconnect a power input (see Figure 2 Element AC POWER) and a power circuitry (see Figure 2 Element 202). The Power Controller (Figure 2 Element 208) controls the switch TR.

Therefore, it would have been obvious to one having ordinary skill in the art to

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combine Youn's switching invention with Ishikawa et al.'s invention. The motivation of connecting other devices together using a single cable is to provide an easy way to connect devices together, and connector space required for each device is reduced as well as the cost of making the connections. The motivation of using a power switching circuit is to only provide power when needed; therefore it minimizes power consumption. So, the combined motivation is to effectively distribute power among a plurality of devices, and to reduce cost and connector space.

Regarding claim 24, Ishikawa et al. disclose an image reader (Figure 1 Element 109) as the first image processing apparatus, and an image output device (Figure 1 Element 117) as the second image processing apparatus.

4.

Claims 4-11, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,526,516 B1 to Ishikawa et al. in view of U.S. Patent No. 5,812,386 to Youn as applied to Claims 1, 2, and 3 above, and further in view of U.S. Patent Publication No. US 200210126516 A1 to Jeon.

Regarding claim 4, Ishikawa et al. and Youn do not disclose the use of a main controller in their inventions.

However, Jeon discloses the use of the Main Control Unit (see Figure 1 Element 14).



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According to Ishikawa et al.; their invention can also be achieved by storing program codes that perform the functions according to the embodiments, and reading them with a CPU, or MPU, and then executing the program (refer to Column 26 Lines 43-52). Therefore, it would have been obvious to one having ordinary skill in the art to provide a storage medium inside the Main Control Unit of Jeon's invention that contains program codes instructing the power controller to control the switch. The motivation to do so is to provide a centralized method of controlling power.

Regarding claim 5, this claim is essentially a combination of Claims 3 and 4. Therefore, it is rejected on the same basis as the rejections of Claims 3 and 4 above.

Regarding claim 6, one having ordinary skill in the art clearly can combine Ishikawa et al.'s invention and Youn's invention, and also integrate the Main Control Unit of Jeon's invention in such a way that the Main Control Unit operates by using electric power supplied from the power circuit. The motivation to do so is to have a simple design by just having one power circuit providing power to multiple devices. Regarding Claim 7, Ishikawa et al. disclose the power controller that controls a switch (Figure 9 Element 13, Figure 13 Element 42, Figure 14 Element 53), and the other apparatus (Figure 1 Element 117) instructs the power controller to do so via Elements 111 and 110 of Figure 1.

Regarding claims 8 and 9, one having ordinary skill in the art can modify Jeon's Main Control Unit (Figure 1 Element 14) to include the notifying function. According to Jeon, the Main Control Unit can check whether the function-performing unit finishes a predetermined function or still performs the predetermined function (Paragraph [0028]

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Lines 6-9). It is possible for one having ordinary skill in the art to modify the Main Control Unit of Jeon's invention to check for two additional conditions. The two additional conditions are. a condition of which a predetermined operation or function is executable, and a condition of which a predetermined operation or function is not executable after a predetermined time period (refer to Paragraph (0029] Lines 1-4). The Main Control Unit will notify the other apparatus of the result of the checking. The motivation to do so is to provide a centralized and systematic way of controlling multiple devices or components, and reduce power consumption.

Regarding claims 10, 11, 20 and 21, it is clear (see the rejections of Claims 8 and 9 above) that one having ordinary skill in the art can add checking functionality to Jeon's Main Control Unit in such a way that it can check whether a particular device (the other apparatus, or the other image processing apparatus) is able to execute a predetermined function or operation, or not able to execute a predetermined function or operation after a predetermined time period (refer to Jeon's Publication, Paragraph [0029] Lines 1-4). The power controller can simply close (connect) the switch if the other apparatus, or the other image processing apparatus is able to execute a predetermined function or operation, and it can simply open (disconnect) the switch if the other apparatus, or the other image processing apparatus is not able to execute a predetermined function or operation. The motivation to do so is to 'provide a centralized and systematic way of controlling multiple devices or components, and reduce power consumption.

5.

Claims 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,526,516 B1 to Ishikawa et al. in view of U.S. Patent No. 5,812,386 to Youn as applied to Claims 1, 2, and 3 above, and further in view of U.S. Patent Publication No. US 6,334,719 B1 to Kimura.

Regarding Claim 12, Ishikawa et al. and Youn do not disclose the use of sensors in their inventions.

However, Kimura discloses the use of sensors arranged at various locations within a device to sense the state of the device (refer to Column 3 Lines 29-35). Therefore, it would have been obvious to one having ordinary skill in the art to use a sensor as taught by Kimura to sense a specific state of a device, and then control the switch according to the result of the sensor. The motivation to do so is to provide a feedback control system that would detect errors automatically. Also, such a sensor can be used (as in Kimura) as part of a power saving system to detect when a document is present (refer to Column 2 Lines 2045, and Figures 3 and 4).

Regarding Claim 13, Youn and Ishikawa et al. do not disclose the use of sensors in their inventions, but Ishikawa discloses the use of an image reader (Figure 1 Element 101). However, Kimura discloses both the image reader (Figure 1 Element 2) and the use of sensors (Figure 1 Elements 25, 26, 27) associated with the image reader. Therefore it would have been obvious to one having ordinary skill in the art to use the document sensor (Figure 1 Element 25) for starting the image read operation, and have the output of the sensor connected to the input of the power controller to control the switch. The motivation to do so is to provide an automatic power control system capable of reducing power consumption. When the document is absent, the switch is not turned on, and therefore power consumption is reduced.

Regarding Claim 14, Ishikawa et al.'s invention is capable of providing power to other devices and components. Therefore, it would have been obvious to one having ordinary skill in the art to use Ishikawa et al.'s invention to provide electric power to the sensor.

Regarding Claim 15, Kimura discloses the image reader (Figure 1 Element 2), which includes a cover plate that is not shown (refer to Column 3 Lines 35-36). The image reader also includes an automatic document feeder (Figure 1 Element 24). The cover plate sensor (Figure 1 Element 27) senses opening/closure of the cover plate and the automatic document feeder (refer to Column 3 Lines 34-36).

Regarding Claim 16, Kimura discloses the image reader (Figure 1 Element 2) comprises a glass platen (Figure 1 Element 10), and a document sensor (Figure 1 Element 26), which senses that an original is placed on the glass platen (refer to Column 3 Lines 33-34).

Regarding Claim 17, Kimura discloses the image reader (Figure 1 Element 2) comprises an automatic document feeder (Figure 1 Element 24), and a document sensor (Figure 1 Element 25), which senses that an original is placed on the feeder (refer to Column 3, lines 31-32).

6. Examiner's Remarks

Applicant's remarks have been considered but are unpersuasive to all the claims for the reasons set forth regarding the 112 rejection.

In the middle of page 12, applicant argues that there is no switch between the poser input and the AC adapter 123. Upon further view, it is determined that this limitation is not claimed in claim 1. Furthermore, the applicant is arguing limitations which are not presented by the examiner in the rejection to this claim.

At the top of page 13, applicant argues that applicant cannot find a power controller adapted to control said switch by using electric power supplied from the **other apparatus**. Applicant's assertion is an allegation. The examiner has supplied concrete evidence, yet applicant has ignored this evidence and simply concluded that the

limitations cannot be found. Applicant should at least indicate why the motivation provided by the examiner cannot be used to obviate the claims.

7.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerome Grant II whose telephone number is 571-272-7463. The examiner can normally be reached on Mon.-Fri. from 9:00 to 5:00 .

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A. Williams, can be reached on 571-272-7471. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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